



# CITY OF PORTLAND ENVIRONMENTAL SERVICES



1120 SW Fifth Avenue, Room 1000, Portland, Oregon 97204 ■ Nick Fish, Commissioner ■ Michael Jordan, Director

December 23, 2015

*via electronic delivery*

Jim Orr  
Oregon Department of Environmental Quality  
Northwest Region Cleanup Program  
700 NE Multnomah St., Suite #600  
Portland, OR 97232

Subject: Data Gap Analysis and Sampling and Analysis Plan; Interim Source Control  
Measure Work Plan  
Crawford Street Corporation (ECSE #2363)

Dear Jim:

The City reviewed the two plans you recently provided to us regarding the source control evaluation at the Crawford Street Corporation facility (Site). The plans, prepared by Bridgewater Group Inc. and dated October 29, 2015 and December 2, 2015 respectively, identify data gaps in the evaluation, sampling plans to fill identified gaps, and interim source control measures for the stormwater pathway. This information is of interest to the City because the Site discharges stormwater to the Willamette River via City Outfalls 50 and 52, and is also adjacent and upstream of the City Water Pollution Control Laboratory.

Based on our review, the City offers the following comments for your consideration.

## Data Gap Analysis and Sampling and Analysis Plan

1. The data screening approach utilized in the analysis did not conform to the Portland Harbor Joint Source Control Strategy (JSCS) and likely underrepresents the significance of contaminants detected in various Site media. The only highlighted values in the data tables are those for which the applicable PRG or SLV was exceeded by a factor of at least 10. All Site data that exceed applicable screening values should be highlighted to identify the contaminants of interest for the Site and to facilitate the data gaps analysis.
2. Data presented in the report are not sufficient to conclude that bank erosion is an insignificant current and future pathway to the river, and further evaluation may be warranted. Elevated concentrations of metals were present in beach samples collected beneath the bank removal area and confirmation data from the bank were not presented in the tables. In addition, detection limits for the 2001 surface soil samples in the vicinity of the removal area were elevated for some contaminants, PCB data are limited, and subsequent bank characterization did not include the portion of the Site subject to remedial action. Lastly, bank seeps have been observed and future plans for stormwater infiltration facilities near the bank may increase the potential for shallow groundwater to move through and erode bank soil.

3. The text indicates that the beach area adjacent to the Site will be addressed through inwater remedial action. However, EPA has not identified this area, or the beach data that indicate areas of remaining contamination, in the Portland Harbor Feasibility Study. Compilation of beach data for future EPA consideration would help to ensure that this area will be addressed as part of the inwater work.
4. The City disagrees with the characterization of erodible soil SLV exceedances in the stormwater pathway as 'limited and modest.' Comparison of Site erodible soil data to DEQ guidance curves indicates that multiple samples had concentrations of metals and/or total PAHs that are above the knees on the curves. Based on the characterization of Site soil and stormwater, contaminated erodible soil is likely the most significant source to Site stormwater.
5. Site data do not support the statement that groundwater does not appear to be a material source of contaminants to the river. Metals were analyzed in only one sample, results indicated significantly elevated concentrations (e.g., arsenic, copper, and lead), and metals are a concern in all other Site media. Metals contamination in groundwater may be more widespread, as the location of the only sample with metals data was not near the area where significant contamination has been found and remediated. Lastly, seep data (Table 3) indicates that concentrations of metals, PAHs, and PCBs are elevated in shallow groundwater discharged from the Site.
6. The following additional pathway analysis data gaps warrant consideration:
  - Erodible bank soil in the vicinity of the removal area and where existing sample locations were not analyzed for all Site COIs (e.g., PCBs).
  - Erodible soil subject to offsite tracking. The majority of erodible soil data from the Site were collected to meet different objectives (i.e., mobilization via stormwater and bank erosion). Additional surface soil in the Site areas subject to vehicle and equipment traffic from the site are needed to conclude that tracking contaminated soil offsite is not a significant pathway.
  - Stormwater PCB data. Existing data are insufficient due to elevated detection limits. Each of the four locations already sampled have only one storm event in which the PCB analysis generated data with method reporting limits that meet JSCS objectives.
  - Groundwater seeps. Two observed seeps have been sampled once; concentrations of PCBs were significantly elevated at one location and both locations had elevated metals. Additional characterization would help to evaluate the significance of shallow groundwater discharge and the potential implications of planned increased stormwater infiltration in this portion of the Site.
7. In addition to consideration of the data gaps above, more information is needed to support the proposed Sampling and Analysis Plan. For groundwater, providing the rationale for well locations would help to demonstrate why locations are appropriate and additional locations are not warranted. For example, existing data from PP-3 indicate that elevated contaminants are present at that location, which may not be represented by samples from proposed MW-2. For stormwater, no information was provided on the Site stormwater system and connections from roof drains to the adjacent municipal conveyance system affiliated with Outfall 52. A piping diagram with proposed sampling locations is needed to show what portions of roof drainage will be represented by each sample.

Interim Source Control Measure Work Plan

8. Overland discharge of contaminated stormwater from the Site to adjacent City property has been an ongoing concern. The plan anticipates that it will take a minimum of a year to complete construction of interim stormwater source controls. Implementation of preliminary measures, such as placement of temporary straw bales or wattles, would help to address this pathway during the period before construction completion.
9. The City encourages scheduling an Early Assistance meeting with BDS regarding preliminary design, in order to identify any significant permitting concerns early in the design process. For example, Figure 4 indicates that the infiltration basin will be designed to overflow to adjacent City property; development standards require stormwater to be managed on site or discharged offsite to an approved conveyance.
10. The estimated ISCM schedule (Table 1) should also include the schedule for development, approval, and implementation of the monitoring and maintenance plan affiliated with the ISCM.

Thank you for your consideration of these comments. Please contact me at (503) 823-2296 if you need clarification or additional information.

Sincerely,



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Water Resources Program Manager  
Portland Harbor Program

Cc: Alex Liverman, DEQ  
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Kim Cox, City of Portland, BES